

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A delivery device comprising
 - (i) an therapeutic antiproliferative agent,
 - (ii) a polymer carrier of the antiproliferative agent, and
 - (iii) a mesh, wherein the mesh comprises a biodegradable polymer poly(lactide-co-glycolide) with a lactide:glycolide ratio ranging from 3:97 to 15:85.
2. (Currently Amended) The device of claim 1 wherein the mesh is in the form of ~~a woven, knit, or non-woven~~ mesh.
- 3.-12. (Canceled)
13. (Currently Amended) The device of claims ~~9-12~~ 1 wherein the poly(lactide-co-glycolide) is poly(L-lactide-co-glycolide).
14. (Currently Amended) The device of claim 1 wherein the therapeutic antiproliferative agent resides within the fibers of the mesh.
15. (Withdrawn and Currently Amended) The device of claim 1 wherein the mesh further comprises a coating, and wherein the coating comprises the therapeutic antiproliferative agent and the polymer carrier of the antiproliferative agent.
- 16.-19. (Canceled)

20. (Withdrawn and Currently Amended) The device of claim 17
wherein the polymer carrier and therapeutic-antiproliferative agent are formed into a film.

21. (Withdrawn and Currently Amended) The device of claim 17
wherein the polymer carrier and therapeutic-antiproliferative agent are formed into a wrap.

22. (Withdrawn and Currently Amended) The device of claim 17
wherein the polymer carrier and therapeutic-antiproliferative agent are formed into a gel.

23. (Withdrawn and Currently Amended) The device of claim 17
wherein the polymer carrier and therapeutic-antiproliferative agent are formed into a foam.

24. (Withdrawn and Currently Amended) The device of claim 17
wherein the polymer carrier and therapeutic-antiproliferative agent are formed into a mold.

25. (Withdrawn and Currently Amended) The device of claim 17
wherein the polymer carrier and therapeutic-antiproliferative agent are formed into a coating.

26. (Currently Amended) The device of claim 17 wherein the polymer carrier
is biodegradable.

27. (Original) The device of claim 26 wherein the biodegradable polymer
carrier is formed from one or more monomers selected from the group consisting of lactide,
glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxan-2-one, 1,5-dioxepan-2-one, 1,4-
dioxepan-2-one, hydroxyvalerate, and hydroxybutyrate.

28. (Withdrawn) The device of claim 26 wherein the biodegradable polymer
carrier comprises a copolymer of lactic acid and glycolic acid.

29. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises a copolymer of lactide and glycolide.

30. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises a copolymer of D,L-lactide and glycolide.

31. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises poly(caprolactone).

32. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises poly(lactic acid).

33. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises a copolymer of lactide and ϵ -caprolactone.

34. (Original) The device of claim 26 wherein the biodegradable polymer carrier comprises a block copolymer having a first block and a second block, wherein the first block comprises methoxypolyethylene glycol and the second block comprises a polyester.

35. (Currently Amended) The device of claim 34 wherein the polyester comprises a polymer selected from the group consisting of a poly(lactide), a poly(glycolide), a poly(caprolactone), or a trimethylene carbonate polymer, poly(hydroxyl acid), poly(L-lactide) | poly(D,L-lactide), poly(D,L-lactide-co-glycolide), poly(L-lactide-co-glycolide), copolymers of lactic acid and glycolic acid, copolymers of ϵ -caprolactone and lactide, copolymers of glycolide and ϵ -caprolactone, copolymers of lactide and 1,4-dioxane-2-one, polymers and copolymers comprising one or more of the residue units of the monomers D-lactide, L-lactide, D,L-lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxane-2-one or 1,5-dioxepan-2-one, and combinations and blends thereof.

36. (Original) The device of claim 34 wherein the polyester is formed from one or more monomers selected from the group consisting of lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxan-2-one, 1,5-dioxepan-2-one, 1,4-dioxepan-2-one, hydroxyvalerate, and hydroxybutyrate.

37. (Currently Amended) The device of claim 35 wherein the poly(lactide) is poly(D,L-lactide).

38. (Original) The device of claim 34 wherein the block copolymer has a methoxypoly(ethylene glycol) : polyester ratio in the range of about 10:90 to about 30:70.

39. (Original) The device of claim 34 wherein the block copolymer has a methoxypoly(ethylene glycol) : polyester ratio of about 20:80.

40. (Original) The device of claim 34 wherein the methoxypoly(ethylene glycol) has a molecular weight range of about 200 g/mol to about 5000 g/mol.

41. (Currently Amended) The device of claim 40 wherein the methoxypoly(ethylene glycol) has a the molecular weight is of about 750 g/mol.

42. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises a block copolymer comprising a structure of A-B-A, wherein the A block comprises polyoxyalkane and the B block comprises a polyester.

43. (Withdrawn) The device of claim 42 wherein the polyoxyalkane is selected from the group consisting of a polyethylene glycol, a poly(ethylene oxide-co-propylene oxide), and a poly(ethylene oxide-co-propylene oxide-co-ethylene oxide).

44. (Withdrawn and Currently Amended) The device of claim 42 wherein the polyester comprises a polymer selected from the group consisting of a poly(lactide), a poly(glycolide), a poly(caprolactone), or a trimethylene carbonate polymer, poly(hydroxyl acids), poly(L-lactide) poly(D,L-lactide), poly(D,L-lactide-co-glycolide), poly(L-lactide-co-glycolide), copolymers of lactic acid and glycolic acid, copolymers of ϵ -caprolactone and lactide, copolymers of glycolide and ϵ -caprolactone, copolymers of lactide and 1,4-dioxane-2-one, polymers and copolymers comprising one or more of the residue units of the monomers D-lactide, L-lactide, D,L-lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxane-2-one or 1,5-dioxepan-2-one, and combinations and blends thereof.

45. (Withdrawn) The device of claim 42 wherein the the polyester is formed from one or more monomers selected from the group consisting of lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxan-2-one, 1,5-dioxepan-2-one, 1,4-dioxepan-2-one, hydroxyvalerate, and hydroxybutyrate.

46. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises a block copolymer comprising a structure of B-A-B, wherein the A block comprises polyoxyalkane and the B block comprises a polyester.

47. (Withdrawn) The device of claim 46 wherein the polyoxyalkane is selected from the group consisting of a polyethylene glycol, a poly(ethylene oxide-co-propylene oxide), and a poly(ethylene oxide-co-propylene oxide-co-ethylene oxide).

48. (Withdrawn and Currently Amended) The device of claim 46 wherein the polyester comprises a polymer selected from the group consisting of a poly(lactide), a poly(glycolide), a poly(caprolactone), or a trimethylene carbonate polymer, poly(hydroxyl acids), poly(L-lactide) poly(D,L-lactide), poly(D,L-lactide-co-glycolide), poly(L-lactide-co-glycolide), copolymers of lactic acid and glycolic acid, copolymers of ϵ -caprolactone and lactide, copolymers of glycolide and ϵ -caprolactone, copolymers of lactide and 1,4-dioxane-2-one,

polymers and copolymers comprising one or more of the residue units of the monomers D-lactide, L-lactide, D,L-lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxane-2-one or 1,5-dioxepan-2-one, and combinations and blends thereof.

49. (Withdrawn) The device of claim 46 wherein the polyester is formed from one or more monomers selected from the group consisting of lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxan-2-one, 1,5-dioxepan-2-one, 1,4-dioxepan-2-one, hydroxyvalerate, and hydroxybutyrate.

50. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises hyaluronic acid.

51. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises chitosan.

52. (Withdrawn) The device of claim 26 wherein the biodegradable polymer carrier comprises sodium alginate.

53. (Withdrawn and Currently Amended) The device of claim 17 wherein the polymer carrier comprises poly(urethane).

54. (Withdrawn and Currently Amended) The device of claim 17 wherein the polymer carrier comprises poly(hydroxyethylmethacrylate).

55.-64. (Canceled)

65. (Withdrawn) The device of claim 2 wherein the woven mesh has a weft comprising a first polymer and a warp comprising a second polymer, wherein the degradation profile of the weft polymer is different than the degradation profile of the warp polymer.

66. (Withdrawn) The device of claim 2 wherein the woven mesh has a weft comprising a first polymer and a warp comprising a second polymer, wherein the degradation profile of the weft polymer is the same as the degradation profile of the warp polymer.

67. (Currently Amended) The device of claim 1 wherein the ~~therapeutic antiproliferative~~ agent is an anti-angiogenic agent.

68. (Original) The device of claim 67 wherein the anti-angiogenic agent is paclitaxel, fucoidon, doxorubicin, or an analogue or derivative thereof.

69. (Original) The device of claim 67 wherein the anti-angiogenic agent is paclitaxel.

70. (Withdrawn) The device of claim 67 wherein the anti-angiogenic agent is doxorubicin.

71. (Withdrawn) The device of claim 67 wherein the anti-angiogenic agent is fucoidon.

72. (Currently Amended) The device of claim 1 wherein the ~~therapeutic antiproliferative~~ agent is capable of inhibiting –smooth muscle cell migration, proliferation, matrix production, inflammation, or a combination thereof.

73.-89. (Canceled)

90. (Withdrawn) The device of claim 1 wherein the device comprises at least two layers of mesh.

91. (Withdrawn) The device of claim 90 wherein at least two of the at least two layers of mesh are fused together.

92. (Withdrawn) The device of claim 90 wherein the device further comprises a film layer.

93. (Withdrawn) The device of claim 92 wherein the film layer resides between two of the at least two layers of mesh.

94.-97. (Canceled)

98. (Withdrawn and Currently Amended) A method for improving or maintaining a body passageway lumen or cavity integrity, comprising delivering to an external portion of the body passageway or cavity a delivery device, ~~the device comprising a therapeutic agent and a mesh, wherein the mesh comprises a biodegradable polymer according to claim 1.~~

99. (Withdrawn) The method of claim 98 wherein the mesh is a woven, knit, or non-woven mesh.

100. (Canceled)

101. (Canceled)

102. (Withdrawn and Currently Amended) The method of claim 98 wherein ~~the polymer comprises a copolymer of L-lactide and glycolide, poly(lactide-co-glycolide) is poly(L-lactide-co-glycolide).~~

103.-113 (Canceled)

114. (Withdrawn and Currently Amended) The method of claim 98
wherein the therapeutic antiproliferative agent resides within the fibers of the mesh.

115. (Withdrawn and Currently Amended) The method of claim 98
wherein the mesh comprises a coating, wherein the coating comprises the therapeutic antiproliferative agent.

116. (Canceled)

117. (Canceled)

118. (Withdrawn and Currently Amended) The method of claim 117-98
wherein the polymer carrier and therapeutic antiproliferative agent are formed into a film.

119. (Withdrawn and Currently Amended) The method of claim 117-98
wherein the polymer carrier and therapeutic antiproliferative agent are formed into a wrap.

120. (Withdrawn and Currently Amended) The method of claim 117-98
wherein the polymer carrier and therapeutic antiproliferative agent are formed into a gel.

121. (Withdrawn and Currently Amended) The method of claim 117-98
wherein the polymer carrier and therapeutic antiproliferative agent are formed into a foam.

122. (Withdrawn and Currently Amended) The method of claim 117-98
wherein the polymer carrier and therapeutic antiproliferative agent are formed into a mold.

123. (Withdrawn and Currently Amended) The method of any one of claims 117 to 122 98 wherein the polymer carrier and therapeutic antiproliferative agent are coated on the mesh.

124. (Withdrawn and Currently Amended) The method of claim 117-98 wherein the polymer carrier is biodegradable.

125. (Withdrawn and Currently Amended) The method of claim 124 wherein the biodegradable polymer carrier comprises a polymer selected from the group consisting of a poly(lactide), a poly(glycolide), a poly(caprolactone), or a trimethylene carbonate polymer, poly(hydroxyl acids), poly(L-lactide) poly(D,L-lactide), poly(D,L-lactide-co-glycolide), poly(L-lactide-co-glycolide), copolymers of lactic acid and glycolic acid, copolymers of ϵ -caprolactone and lactide, copolymers of glycolide and ϵ -caprolactone, copolymers of lactide and 1,4-dioxane-2-one, polymers and copolymers comprising one or more of the residue units of the monomers D-lactide, L-lactide, D,L-lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxane-2-one or 1,5-dioxepan-2-one, and combinations and blends thereof.

126. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises a copolymer of a lactide and glycolide.

127. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises poly(caprolactone).

128. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises poly(lactic acid).

129. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises a copolymer of a lactide and ϵ -caprolactone.

130. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises a block copolymer having a first block and a second block, wherein the first block comprises methoxypolyethylene glycol and the second block comprises a polyester.

131. (Withdrawn and Currently Amended) The method of claim ~~124~~130

wherein the polyester comprises a polymer selected from the group consisting of a poly(lactide), a poly(glycolide), a poly(caprolactone), or a trimethylene carbonate polymer, poly(hydroxyl acids), poly(L-lactide) poly(D,L-lactide), poly(D,L-lactide-co-glycolide), poly(L-lactide-co-glycolide), copolymers of lactic acid and glycolic acid, copolymers of ϵ -caprolactone and lactide, copolymers of glycolide and ϵ -caprolactone, copolymers of lactide and 1,4-dioxane-2-one, polymers and copolymers comprising one or more of the residue units of the monomers D-lactide, L-lactide, D,L-lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxane-2-one or 1,5-dioxepan-2-one, and combinations and blends thereof.

132. (Withdrawn and Currently Amended) The method of claim 131

wherein the poly(lactide) is poly(D,L-lactide).

133. (Withdrawn) The method of claim 130 wherein the block copolymer has a methoxypoly(ethylene glycol) : polyester ratio of 10:90 to about 30:70.

134. (Withdrawn) The method of claim 130 wherein the block copolymer has a methoxypoly(ethylene glycol) : polyester ratio of about 20:80.

135. (Withdrawn) The method of claim 130 wherein the methoxypoly(ethylene glycol) has a molecular weight of about 200 g/mol to about 5000 g/mol.

136. (Withdrawn) The method of claim 135 wherein the molecular weight is about 750.

137. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises an A-B-A block copolymer, wherein the A block comprises polyoxyalkane and the B block comprises a polyester.

138. (Withdrawn) The method of claim 137 wherein the polyoxyalkane is selected from the group consisting of a polyethylene glycol, a poly(ethylene oxide-co-propylene oxide), and a poly(ethylene oxide-co-propylene oxide-co-ethylene oxide).

139. (Withdrawn and Currently Amended) The method of claim 137 wherein the polyester comprises a polymer selected from the group consisting of a poly(lactide), a poly(glycolide), a poly(caprolactone), or a trimethylene carbonate polymer, poly(hydroxyl acids), poly(L-lactide) poly(D,L-lactide), poly(D,L-lactide-co-glycolide), poly(L-lactide-co-glycolide), copolymers of lactic acid and glycolic acid, copolymers of ϵ -caprolactone and lactide, copolymers of glycolide and ϵ -caprolactone, copolymers of lactide and 1,4-dioxane-2-one, polymers and copolymers comprising one or more of the residue units of the monomers D-lactide, L-lactide, D,L-lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxane-2-one or 1,5-dioxepan-2-one, and combinations and blends thereof.

140. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises a B-A-B block copolymer, wherein the A block comprises polyoxyalkane and the B block comprises a polyester.

141. (Withdrawn) The method of claim 140 wherein the polyoxyalkane is selected from the group consisting of a polyethylene glycol, a poly(ethylene oxide-co-propylene oxide), and a poly(ethylene oxide-co-propylene oxide-co-ethylene oxide).

142. (Withdrawn and Currently Amended) The method of claim 140 wherein the polyester comprises a polymer selected from the group consisting of a poly(lactide), a poly(glycolide), a poly(caprolactone), or a trimethylene carbonate polymer, poly(hydroxyl acids), poly(L-lactide) poly(D,L-lactide), poly(D,L-lactide-co-glycolide), poly(L-lactide-co-glycolide), copolymers of lactic acid and glycolic acid, copolymers of ϵ -caprolactone and lactide, copolymers of glycolide and ϵ -caprolactone, copolymers of lactide and 1,4-dioxane-2-one, polymers and copolymers comprising one or more of the residue units of the monomers D-

lactide, L-lactide, D,L-lactide, glycolide, ϵ -caprolactone, trimethylene carbonate, 1,4-dioxane-2-one or 1,5-dioxepan-2-one, and combinations and blends thereof.

143. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises hyaluronic acid.

144. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises chitosan.

145. (Withdrawn) The method of claim 124 wherein the biodegradable polymer carrier comprises sodium alginate.

146. (Withdrawn and Currently Amended) The method of claim 117-98 wherein the polymer carrier comprises poly(urethane).

147. (Withdrawn and Currently Amended) The method of claim 117-98 wherein the polymer carrier comprises poly(hydroxyethylmethacrylate).

148.-157. (Canceled)

158. (Withdrawn) The method of claim 99 wherein the woven mesh has a weft comprising a first polymer having a first degradation profile and a warp comprising a second polymer having a second degradation profile, wherein the first and second degradation profiles are different.

159. (Withdrawn and Currently Amended) The method of claim 98 wherein the therapeutic agent antiproliferative agent is an anti-angiogenic agent.

160. (Withdrawn) The method of claim 159 wherein the anti-angiogenic agent is paclitaxel, fucoidon or doxorubicin, or an analogue or derivative thereof.

161. (Withdrawn) The method of claim 159 wherein the anti-angiogenic agent is paclitaxel.

162. (Withdrawn) The method of claim 159 wherein the anti-angiogenic agent is doxorubicin.

163. (Withdrawn) The method of claim 159 wherein the anti-angiogenic agent is fucoidon.

164. (Withdrawn and Currently Amended) The method of claim 98 wherein the therapeutic-antiproliferative agent is capable of inhibiting smooth muscle cell migration, proliferation, matrix production, inflammation, or a combination thereof.

165.-181. (Canceled)

182. (Withdrawn) The method of claim 98 wherein the body passageway is selected from the group consisting of arteries, veins, heart, esophagus, stomach, duodenum, small intestine, large intestine, biliary tracts, ureter, bladder, urethra, lacrimal ducts, trachea, bronchi, bronchiole, nasal airways, eustachian tubes, external auditory mayal, vas deferens, and fallopian tubes.

183. (Withdrawn) The method of claim 98 wherein the cavity is selected from the group consisting of abdominal cavity, buccal cavity, peritoneal cavity, pericardial cavity, pelvic cavity, perivisceral cavity, pleural cavity, and uterine cavity.

184. (Withdrawn) The method of claim 182 wherein the body passageway is an artery or vein.

185. (Withdrawn) The method of claim 98 wherein the method is for treatment or prevention of iatrogenic complications of arterial and venous catheterization.

186. (Withdrawn) The method of claim 98 wherein the method is for treatment or prevention of complications of vascular dissection.

187. (Withdrawn) The method of claim 98 wherein the method is for treatment or prevention of complications of gastrointestinal passageway rupture and dissection.

188. (Withdrawn) The method of claim 98 wherein the method is for treatment or prevention of restenotic complications associated with vascular surgery.

189. (Withdrawn and Currently Amended) A method for treating or preventing intimal hyperplasia, comprising delivering to an anastomotic site a delivery device, ~~the device comprising a therapeutic agent and a mesh, wherein the mesh comprises a biodegradable polymer of claim 1.~~

190. (Withdrawn) The method of claim 189 wherein the anastomotic site is selected from the group consisting of a venous anastomosis, an arterial anastomosis, an arteriovenous fistula, and an arteriovenous graft.

191. (Withdrawn and Currently Amended) The method of claim 189 wherein the anastomotic site is ~~an arterial anastomosis, wherein the arterial anastomosis is a site of an arterial bypass.~~

192. (Withdrawn) The method of claim 189 wherein the device is delivered to an external portion of the anastomotic site.

193.-197. (Canceled)

198. (Withdrawn and Currently Amended) A method of producing a delivery device of claim 1, comprising coating a mesh that comprises poly(lactide-co-glycolide) with a composition that comprises with an therapeutic antiproliferative agent and a polymer carrier of the antiproliferative agent, wherein the mesh comprises a biodegradable polymer.

199. (Withdrawn) The method of claim 198 wherein the mesh is coated by painting, dipping, or spraying.

200. (Withdrawn) The method of claim 198 wherein the coating is in the form of a film.

201. (Withdrawn) The method of claim 198 wherein the coating comprises a gel.

202. (Withdrawn) The method of claim 198 wherein the coating comprises a foam.

203. (Withdrawn) The method of claim 198 wherein the delivery device is formed into a wrap.

204.-231. (Canceled)

232. (New) The delivery device of claim 1, wherein the delivery device is perivascular wrap.

233. (New and Withdrawn) The delivery device of claim 1, wherein the antiproliferative agent is rapamycin.

234. (New) The delivery device of claim 233, wherein the antiproliferative agent is paclitaxel and the perivascular wrap comprises 0.001 mg/cm² to 5 mg/cm² of paclitaxel.

235. (New) The delivery device of claim 234, wherein the perivascular wrap comprises 0.03 mg/cm² to 0.3 mg/cm² of paclitaxel.

236. (New and Withdrawn) The method of claim 98, wherein the delivery device is perivascular wrap.

237. (New and Withdrawn) The method of claim 189, wherein the delivery device is a perivascular wrap.